

SULLYS HILL

NARRATIVE REPORT

JANUARY-DECEMBER 1964

Division of Wildlife Refuges

3

Narrative Report Routing Slip

Refuge SULLYS HILL Year 1961

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NARRATIVE REPORT FOR
SULLYS HILL NATIONAL GAME PRESERVE
AND
EASEMENT REFUGES OF DISTRICT NO. 2
CALENDAR YEAR 1964

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF SPORT FISHERIES AND WILDLIFE
FISH AND WILDLIFE SERVICE

SULLYS HILL NATIONAL GAME PRESERVE
FORT TOTTEN, NORTH DAKOTA

John K. Bauman	Refuge Manager
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I. GENERAL

A. Weather Conditions

Month	Snowfall	Precipitation		Max Temp.	Min Temp.
		This Month	Normal*		
January	5.75	.51	.53	42°	-22°
February	5.50	.95	.37	42	-19
March	5.25	1.12	.77	44	-20
April	6.00	2.26	1.15	74	13
May	-	2.05	2.11	93	29
June	-	5.66	3.36	94	30
July	-	1.62	2.57	96	52
August	-	3.52	2.18	101	41
September	-	2.81	1.70	84	25
October	-	.43	1.07	82	20
November	3.50	.42	.68	60	-22
December	7.40	.47	.49	35	-28
ANNUAL TOTAL	33.40	21.82	16.98	Extremes 101	-28°

* Based on 1931 - 1960 period.

The weather observations were made at Central School in Devils Lake for the first half of the year and at the KDLR radio station during the last half. Following the closing of the weather bureau office in Devils Lake the personnel at Central School maintained weather bureau facilities until a cooperative weather station was underway at Radio Station KDLR.

As can be seen, precipitation was above normal as recorded at Devils Lake. However, some showers recorded in Devils Lake did not extend south to Sully's Hill and by mid-July we were very dry. The situation was particularly acute, since our sub-soil moisture had been depleted during the previous dry fall with its unusually late killing frost, that caused a maximum of soil drying through evaporation and transpiration.

A rainfall of about one and three-fourths inches on September 26, gave relief to parched soil and encouraged some late fall growth of our grasslands.

The year started with January temperatures much above normal during most of the month. March broke several records. Early March temperatures were above normal and robins and abnormally early migrating song birds were caught in temperatures as low as -20° during the last week of the month. On March 27, a low temperature of -8° recorded in Devils Lake tied the all time low recorded in 1913 for that date. The -18° recorded on March 25 was the all time low since 1904, when weather records were initiated and beat the prior record by four degrees. The -20° on March 26, beat the previous low record for that date by 11 degrees! Colder than normal temperatures continued well into May and June, cooling and shortening our summer. Ice was noted at headquarters on the morning of June 1, and again on June 10. Frost at this time damaged some oak and ash trees. July was the only month in which no frost was recorded at Sully's Hill.

Much damaging wind occurred this summer, much more than is normal, causing excessive amounts of timber clean-up in the recreation area and on our roads and trails. A devastating hail storm with stones exceeding an inch in diameter, occurred on July 26. Farmers in a narrow strip extending from Sully's Hill northwest a few miles were completely wiped out of their ripening grain crop.

The first killing frost arrived on September 11, with a temperature of 25° recorded in Devils Lake. Frosts that nipped tender vegetables such as tomatoes, squash, and cucumbers were noted at Sully's Hill as early as August 11. However, there wasn't much garden stuff to be damaged following the hail storm of July 26. November 18, was calm with temperatures down to 0° during that night. At this time Devils Lake and the Preserve's Sweetwater Lake froze over and remained frozen. Subnormal temperatures prevailed for the rest of the month and also during December which was very cold. The average temperature this December was 1.7° . There were only four Decembers since 1904, colder than this one. December of 1916 had an average temperature

of 0.8° . December of 1917 had an average temperature of -3.6° . December of 1924 had an average temperature of -0.7° , and December of 1927 had an average temperature of -1.4° .

B. Habitat Conditions: During the previous hot, dry, fall one of the longest growing seasons on record further depleted sub soil moisture and we entered the period in pretty poor shape, moisture wise. The ground was able to absorb all run-off from the early thaws of February and March, however, some run-off did occur following thaws and snows of the first week in April.

It was not enough to reverse the trend of the drowth. Again, new reports came in of the drying of lakes that had never been dry before. A farmer from north of Michigan reported the lake on his farm dry for the first time since the land was homesteaded in 1883!

2. Food and Cover: The year was not a good one for our big-game range, nor was it good for our haylands. Following May 6, only a trace of moisture was noted for the next twenty-nine days. Soil moisture became depleted just as it was needed to produce our hay and forage requirements. Plums, chokecherries, and June berries began to dry up and fall off and only a poor berry crop was produced. Very few berries of any kind hang on the bush for winter bird food. Again, no acorns were produced.

The one and three quarters inches of rain falling on September 26, gave some measure of relief to pasture lands and stimulated some fall growth. Hay feeding was begun as early as the animals would take it (late October) to relieve grazing pressure and leave as much snow stopping growth in the meadows as possible.

A fertilizer application was made to approximately ten acres of big-game pasture on December 9, at the rate of application of 200 pounds per acre of 33.5-0-0. About four inches of loose snow was present at the time of application. Approximately fifty acres of hayland also received a like application at the same time.

During the early part of the period patches of dead grass were noted in our range lands. These later became "islands" of annual weeds. Our Benson County Agent informed us that this was most likely due to a virus and that it was a common occurrence in the area this year. The patches are not extensive and do not amount to much total grazing loss. Unless conditions are such that the virus extends itself, killing the grass over larger areas, it should be no cause for concern.

The first patch of leafy spurge on refuge lands was located along Highway 57 this year. It was a small patch and soil sterilant was immediately applied. This scourge of grasslands is quite common on lands around us where nothing is being done to control it.

II WILDLIFE

- A. Migratory Birds. The first waterfowl (four pintail and ten mallards) were noted on March 13, north of our Sibley Lake easement refuge. Subsequent record breaking, below normal temperatures and stormy weather seemed to shut off the migration until the first week in April when a few mallards and geese began to appear in the area along with large flocks of crows. During the April 10 to 16 period all waterfowl species common to the area with the exception of the ruddy duck, arrived. Notable influxes of waterfowl were noted on April 10, April 15 & 16, April 26, and the April 30 to May 3 period.

Geese were first noted on April 3. No earlier migrating common Canada geese were noted. In past years these birds have arrived during the March 12 - 24 period, well ahead of the other goose species.

Wood duck arrived at Sully's Hill on May 8, when three were noted on Sweetwater Lake in the recreation area. Wood ducks were seen off and on during the summer on this lake and on two recently constructed man made ponds on a spring fed brook in the woods to the east of it. During the late summer and fall seven of these birds, thought to have been a brood, were often seen on one of these ponds.

Display flock Canada geese were released to Sweetwater Lake on April 14. Three pairs began nesting on April 24, April 28, and April 30. One pair successfully hatched and reared six geese. One was unsuccessful. The third, with a clutch of five eggs attempted to nest on the shore rather than one of the rafts or rock piles provided for nesting purposes. Do to the almost impossible chance of a successful shore nesting in the heavily used recreation area, the five eggs were removed and placed under a domestic hen. Three hatched and were hand reared at headquarters.

Duck broods noted in the Preserve's limited waterfowl habitat were three mallard, two canvassback, one baldpate, one blue-winged teal, and the wood duck brood mentioned above.

The fall migration was thought to have been a little ahead of prior years. This was probably due to late September storms that brought snow and cold to Canada. Our annual pre-season aerial survey on September 30, showed more mallards. They were found in large numbers from Silver Lake north along the Mauvias Coulee and it's vicinity to the Rock Lake area where an estim-

ated 48,000 were seen. Large numbers were also seen in the Doyon - Michigan area. Rain on September 23, and again on September 26, had been heavy and much improved water conditions in these areas. A four inch snowfall at Calgary on September 26, was probably largely responsible for this excess of mallards over the normal.

There was a lack of gadwall, baldpate, blue-winged teal, and redhead noted on September 30. Canvassback were in normal numbers for recent years. The gadwall and baldpate had been present the week prior and it was thought that the storm of September 26 pushed them on south. Agent Jensen reported a larger influx of gadwall and baldpate in the Jamestown area at this time.

Goose numbers appeared to have been normal in the Lake Region for this September 30, date. A total of 146 large Canada geese, 530 small Canada geese, 752 white fronts, 1,400 blues and snows were seen. One hundred twenty-five swan and 225 cranes were also seen.

Goose numbers built up rapidly in the next succeeding days, with peak numbers in the area a week or ten days ahead of prior years.

Duck hunting was good for those who cared to, and were smart enough to, outwit the wily mallard. On Devils Lake some shovelers and lesser amounts of gadwall and baldpate remained to provide some shooting for those not so particular. However, most hunters were after geese, at least during the open, forenoon hours.

Goose hunting was very good and a record number of non-resident licenses were sold in Ramsey County. Due to the prolonged drouth, geese were concentrated on the only remaining water areas, principally Lake Alice Refuge (Lac aux Mortes) and Dry Lake. Good populations also used Rock Lake Refuge, Silver Lake Refuge, Snyder Lake Refuge, Free Peoples Lake, and during the earlier part of the season East and West Devils Lake. The kill was heavy with the state estimating the North Dakota goose harvest in excess of 90,000 birds. A snow goose banded by the Russians at Wrangle Island was one of those shot north of the Lake Alice Refuge by Harold Neameyer of Rolla.

Pre-season late September rains not only helped the water level situation in the few remaining lakes but prevented the excessive "blackening" of fields by cultivation and encouraged grain to sprout providing excellent goose feed.

The migration was a slow trickle until early November when the tempo increased. Geese and Mallards started leaving in early November with a big exodus during the November 11 to 14 period.

Some mallards remained much later with one flock of several hundred using an open hole on the Sheyenne river and feeding on a nearby field of unthreshed wheat swathes, until well into December.

- B. Upland Game Birds. Upland species did not appear to have had a good year in this area. There appeared to be very poor reproduction. No pheasant broods were noted. Paired Hungarian partridge with no young were noted as late as mid-August. Hun broods were very small. The largest brood seen was four young. Sharp-tailed grouse seemed to have done a little better. Some were on several occasions seen during haying operations.

At the close of the period one covey of eight Hungarian partridges was known to be using Unit Ia., and two cock and two hen pheasants had also been seen there. The pheasants were last seen feeding at a straw stack of a neighbor about one hundred yards south of the refuge. This is the second successive year that pheasants have failed to use the feeder in the recreation area after being fed there winters for many, many years.

To date, little evidence has been seen of wintering sharp-tailed grouse using the big-game enclosure. On two occasions only a single grouse has been observed. Very few sightings were noted during last winter.

- C. Big-game animals. We entered the period with twenty-seven bison in the big-game enclosure. The first of thirteen calves appeared on April 20. Seven animals, five bulls and two cows, were butchered during the latter days of the period. At the close of the period we had thirty-one animals. Two bison, one a calf, had disappeared. No trace of them has been found to date.

The 1964 heifer calves had not been vaccinated nor the live sales (three heifers) delivered, at the close of the period. Bitter cold weather had discouraged us from completing this work.

We entered the period with eighteen elk. One 1963 calf disappeared during the early part of the period. Its fox eaten remains were found at the southeast corner of the big-game enclosure on February 20. On December 9, a cow elk was found shot. Certain evidence pointed to an Indian youth, bringing our known losses to two elk. However, at the close of the period we had only seventeen elk after counting a calf crop of six and possibly seven animals, earlier in the year. Obviously one or possibly two others disappeared. No trace of these missing animals has been found.

NO MENTION HERE OF
WHITE-TAIL HERD. NO
BIG-GAME ANIMAL FORM
SUBMITTED, NOR WAS
SECOND "SET" OF NR
FORMS REC'D. 8

The following sales of big-game animals were made during the period:

ELK

<u>Buyer</u>	<u>Quantity</u>	<u>Delivered</u>	<u>Receipts</u>
Lehr Wildlife Club	1 Bull	October 30, 1964	\$ 110.00
Harlow Wildlife Club	1 Cow	November 11, 1964	110.00
Elks Club, Virginia Minnesota	1 Bull	December 9, 1964	110.00
VFW, Harvey	1 Bull	December 29, 1964	<u>110.00</u>
		Total Elk Sales	\$ 440.00

BUFFALO (Butchered)

<u>Buyer</u>	<u>Quantity</u>	<u>Delivered</u>	<u>Receipts</u>
Buffalo Lake Wildlife Club and Wolford Wildlife Club	1 Bull	November 25, 1964	\$ 220.00
Lions Club, Valley City	1 Bull	November 24, 1964	220.00
Devils Lake K. C.'S	1 Bull	November 24, 1964	220.00
Minot K. C.'S	1 Bull	December 7, 1964	220.00
Devils Lake VFW	1 Bull	November 25, 1964	220.00
Warwick Wildlife Club Lakota Wildlife Club	1 Cow	December 28, 1964	220.00
Bottineau Wildlife Club & Devils Lake Wildlife Club	1 Cow	December 28, 1964	<u>220.00</u>
		Total butchered buffalo sales	\$1,540.00

BUFFALO (live)

<u>Buyer</u>	<u>Quantity</u>	<u>Delivered</u>	<u>Receipts</u>
George Torrison Warwick, North Dakota	3 heifer	Not yet delivered	\$ <u>600.00</u>
	Total live buffalo sales		600.00
Total receipts of all animal disposal sales			\$2,580.00

Refuge Receipts Summarized

SPECIAL USE PERMITS

Grazing	\$ 150.00	
Hay sales	40.00	
Bee Pasture	<u>1.20</u>	
Sub Total		\$ 191.20

SURPLUS ANIMAL SALES

Elk (butchered)	\$ 440.00	
Buffalo (butchered)	1,540.00	
Buffalo (live)	<u>600.00</u>	
Sub Total		\$ <u>2,580.00</u>
Total Refuge Receipts		\$2,771.20

- D. Fur Animals, Predators, Rodents, and Other Mammals. Fewer of these animals were seen during the year. Although a few lynx are still being caught in the Pembina Hills, none have been caught or seen in this area. On January 22, a mink got into the shed housing our display waterfowl flock and killed four ducks. An occasional mink or coon track was seen during the year but they did not seem as plentiful as formerly. On April 11, a road killed muskrat was seen; the only 1964 sighting. Squirrel numbers are at a low, possibly due to so many years without an acorn crop and with poor yields of other mast.

Cottontail and snowshoe numbers appeared to be up at the close of the period. A weasel established residence behind the food freezer in the attached garage of the refuge managers home, towards the close of the period. This was a welcome addition for a weasel in the garage will keep mice and rats out of the house. Although poison has always been present the only time in the last ten years that the barn has been kept free of these rodents was during a three year period when a weasel established residence. The animal became quite tame and could often be seen curled up in a hole in the hay or in a hen's nest. Neither personal domestic poultry nor government display flock birds were molested although the weasel lived in very close association with them.

Rats are a particular problem here since they are found around the shacks of our Indian neighbors where they are attracted to the surplus commodities piled therein. Each fall they invade refuge buildings. The multitude of underfed Indian dogs have become a predator problem in the area, harrassing both domestic stock and wildlife.

- E. Hawks, Eagles, Owls, Crows, Ravens, and Magpies. The spring migration of these birds started a bit earlier than usual, probably due to the mild weather. The first crow was seen at the Preserve on March 9, five days earlier than in 1963. A lone bald eagle was noted on March 13. The first red-tailed hawk, our common summer resident, arrived on April 5. At least one pair of these birds nested on the Preserve, in the big-game enclosure. Coopers hawk were first noted on April 8, and six sparrow hawks arrived on April 14. These birds are with us throughout the summer months. The magpie is a year around resident that is most commonly seen during the winter. It is then often seen feeding on the ofal that remains from the animal disposal operations. Eagles sometimes feed in this manner also and two were here during the last week in November.
- F. Other Birds. The usual multitude of small birds appeared during the spring migration. Some of the arrival dates are as follows: Waxwing March 4, Redpoll March 12, Tree Sparrows March 17, Meadow-lark April 2, Slate colored Juncos April 6, Red-winged blackbirds April 10, Robins April 10, Mourning doves April 11, Killdeer April 14, Bluebird April 28, Baltimore Oriole May 5, and Wrens May 20.

Spring is truly a wonderful time at the Preserve for new species arrive almost daily, filling the air with their music and flashing bits of color. With most species the arrivals are not just a few individuals but massive flocks that can be overwhelming in their beauty.

Winter resident species such as the blue jay, black-capped chickadee, nuthatch, downy and hairy woodpeckers were again thought to have been not as plentiful as in former years. For the second consecutive year the pine grosbeak was not noted.

- G. Fish. No fish have been seen in Preserve waters during the period. Evidently the fathead minnow population of Sweetwater Lake, in the public recreation area, experienced a complete die off during the 1963-64 winter for none were seen this year. An annual die off was usual during the winter months. However, enough survived to repopulate the lake each year. Perhaps the extreme dry condition, with a low lake level, and the failure of springs to flow in the east end of the lake during 1964, all contributed to the extermination of the fathead minnow population.

III REFUGE DEVELOPMENT AND MAINTENANCE

A. Physical Development. During the period one and one-half miles of fencing was completed in section twenty. This fence was constructed largely with funds allotted under the Soil and Moisture Program. We hope to continue our fencing program until all lands justifying this protection are fenced. The primary purpose of our fencing program is to reduce livestock and human trespass and the resulting losses in the form of timber, hay, etc. Photographs in Section VII of this report bear witness to these losses.

B. Plantings.

2. Trees and Shrubs. Again willow slips were set out in an effort to establish browse plantings in the big-game enclosure. Again the drouth dried up the wet areas in which they were planted before adequate root systems became established.

Some basswood, birch, elm, pine, and spruce were set out in the headquarters area and along Highway 57 to enhance the natural beauty of these areas. Water was carried to these plantings and most survived.

4. Cultivated Crops. No cultivated crops were grown this year, however; eighty-five acres of hay land was fallowed following removal of the hay crop in order to prepare the land for a grass and grain nurse crop seeding, next year. Weed control, through fallowing, and reseeding, not only improves the hay land but also, indirectly, our big-game range where the hay is fed during the winter months. If we can produce good quality hay, free of weeds, on our hay land; we are less likely to introduce weed seeds to the big-game range when the hay is fed there.

A fall planting of forty acres of mixed western wheat grass, slender wheat grass, and switch grass, was accomplished in 1963. At this time forty-three acres was planted to alfalfa, also. Both plantings were successful and produced fine stands this year with an increase in hay production, in spite of dry weather, of approximately 250 per cent per acre over the remaining old quack grass lands.

The grass seeding was fertilized with an application of approximately 250 pounds per acre of 33.5-0-0 on the snow in December of this period.

D. Control of Weeds. Weed control, other than the fallowing mentioned above, was confined to spot treatment of such persistent weeds as leafy spurge and Canada thistle and the spraying of poison ivy in the recreation area.

IV RESOURCE MANAGEMENT

- A. Grazing: The drouth and shortage of grass made our grazing unit again attractive to Marvin Jabs and Special Use Permit No. 25697 was issued.

The only other refuge grazing was that of the Refuge Manager's cow and calf under Special Use Permit No. 25698. Twelve stands of bees using refuge lands were also authorized by the same permit.

- B. Haying: Four tons of loose, stacked hay of poorer quality harvested from hay unit II of refuge tract Ia was sold to Mr Donald DeVany at \$10.00 per ton or \$40.00 under Special Use Permit No. 25699. Mr. DeVany is one of the cooperators that had harvested the hay.
- D. Timber Removal: One free use permit was issued to Pierre Culbertson to remove wood cut from a powerline right-of-way. This was the only authorized timber removal to report for the period.
- F. Other Uses: Demand for buffalo was normal with a greater demand for elk again experienced. As in the past, sales were reserved for organizations only and no sales were made to individuals.

No butchering was done until mid-November. There are reasons for this. We like to have the animals take advantage of the rapid fall gains that are experienced during the cool weather following fly season. Since we have no artificial cooling facilities we must wait until outside temperatures will suffice for butchering and storing the field dressed animals until picked up by the purchasers. We like to butcher in the corral if possible. By waiting until cold weather the buffalo can be baited into the corral and sometimes part of the elk and deer also. An animal butchered in the corral cannot run off in the woods and die. We like to have snow so that the range harvested deer and elk can be found easier and with less chance of a cripple being lost. This year we had no early snow. Another reason for late butchering is that it conflicts with patrol on the waterfowl refuges if done earlier.

Nine surplus deer were again donated to the North Dakota School for the Deaf and the Fort Totten Community School (Bureau of Indian Affairs.)

VI PUBLIC RELATIONS

- A. RECREATION USES: Public use of the Preserve's recreation area was about the same as last year's which was somewhat less than in former years or about 42,500 use days as determined by spot checks. We see little chance of greatly expanded use during the near future. Within the last year, similar recreation developments have materialized at Sheyenne, Tolna, near Warwick, and at several other places somewhat more distant but still fairly close. All are in conjunction with newly stocked fishing waters. These are taking the recreation pressure off of Sully's Hill, an area that once had the only decent picnic grounds in this part of the state. This season, however, inclement weather shortened our picnic season and was the probable cause for some of the drop in use.

During the summer period the refuge was host to many groups and organizations. Among them were schools, churches, wildlife clubs, Boy Scout Troups, Farm Bureau and Farmer's Union, Walther League, Homemakers, and many others.

On June 20, the refuge manager showed the refuge to two Chilean exchange farmers and their hosts. The Chileans were brought to this country by the Farmer's Union to study our agriculture practices and agricultural cooperatives.

- B. Refuge Visitors: The following official visitors were recorded during the period:

<u>Date</u>	<u>Name and Organization</u>	<u>Purpose of Visit</u>
1/22	Ernest Zahn, FWS - P & RC	Courtesy call
1/28	V. Blazevic, FWS - USGMTA	Law Enforcement Problem
1/30	V. Blazevic, FWS - USGMTA	Indian violations
1/31	J. Kreymeier, USPHS	Courtesy call
2/18	J. Mc Phereson, Chamber of Commerce	Tourist literature
2/19	P. Kohlhase	Lake Alice plug cross section
2/19	F. Hemming	Lake Alice plug cross section
3/19	J. Kreymeier, USPHS	Courtesy call
3/30	V. Blazevic, FWS - USGMTA	Law Enforce Problem
4/03	E. Zahn, FWS - P & RC	Foxes at Johnson Lake Refuge
4/14	V. Blazevic, FWS - USGMTA	Air Base Surplus Items
4/20	J. Winship, FWS - PILOT Biologist	Easement Refuge Waterfowl Survey
5/15	E. Doeling, FWS - HY. ENG.	Lake Alice Outlet lot
5/20	L. Fann, FBI	Fence Post Theft
5/29	J. Windship, FWS - PILOT Biologist	Breeding Pair counts
5/29	V. Blazevic, FWS - USGMTA	Pick up dove bait

<u>Date</u>	<u>Name and Organization</u>	<u>Purpose of Visit</u>
6/01	La Von Grinde, NDGNF	Courtesy Call
6/05	V. Blazevic, FWS - USGMATA	Deliver confiscated live goose
6/13	F. Carpenter, FWS - Refuge Supervisor	Refuge Inspection
6/13	E. Smith, FWS - Assistant Refuge Supervisor	Refuge Inspection
7/08	M. Hammond, FWS - Biologist	Brood Chronology Transect
7/14	E. Trecker, FWS - Recreation Specialist	Inspect Recreation facilities
7/15	D. Percuchin, FWS - Wetlands Manager	Native Grass Identification
8/11	M. Hammond, FWS - Biologist	Brood Chronology Transect
8/11	D. Gilbert, FWS - Biologist	Brood Chronology Transect
8/17	R. Thurman, BIA	Reported our fence cut
8/18	Dr. Springer, FWS - South Dakota Unit Leader	Courtesy call
8/21	R. Fries, FWS - Wetland Manager	Picked up grass seed
9/04	W. Knudson, Bottineau School of Forestry	Indian Artifacts, etc.
9/04	Harold Bliss, Mayville State Teachers College	Indian Artifacts, etc.
9/11	M. Hammond, FWS - Biologist	Brood Chronology Transect
10/11	D. Swanson, FWS - Asst. Sup. Game Mgt.	Courtesy call
10/11	H. Jenson, FWS - USGMATA	Courtesy call
10/12	E. Zahn, FWS - P & RC	Courtesy call
10/14	L. Harrison, FWS - Admin. Assistant	Housing survey
11/12	V. Blazevic, FWS - USGMATA	Delivered live swan
11/17	J. Nyland, NDGNF	Delivered live swan
12/15	V. Blazevic, FWS - USGMATA	Law Enforcement problems
12/15	E. Sanderson, NDGNF	Law Enforcement problems
12/18	V. Blazevic, FWS - USGMATA	Delivered Jeep for Storage during winter.

- C. REFUGE PARTICIPATION: The refuge manager continued to be active in the Devils Lake Rotary Club where he served as club president during the first half of this year and as club services director during the last half. Serving in these offices he was active in many community and youth projects.

During April the Rotary District 554 participated in an International Good-will Flight to our matched district in Northern England (District 103). Rotarians from North Dakota and Western Minnesota left Minneapolis airport on April 5, via a chartered Air France Boeing 707. The flight returned on April 18. The Devils Lake Club participated sending the refuge manager as their representative, to pursue the fourth object of Rotary; that of International Understanding, Peace and Good Will.

While in Northern England the refuge manager was able to see examples of both private and British Nature Conservancy Refuges, as well as he also showed slides of Sully's Hill Game Preserve before two groups of British Rotarians.

Following their return from England the refuge manager and wife were guests of many local organizations where slides of their trip were shown. The refuge manager was one of four who participated that were asked to address the district Rotary assembly in Minot on this international good-will project. The talk was well received and interest in continuing these charter flights was such that another will leave our District for Oslo, Norway, during the coming year. Also, a return flight is expected from the English Rotary District visited by the refuge manager.

Another international understanding project that the refuge manager's whole family participated in was that of hosting a Korean law student from the University of North Dakota during the Thanksgiving Holiday week-end.

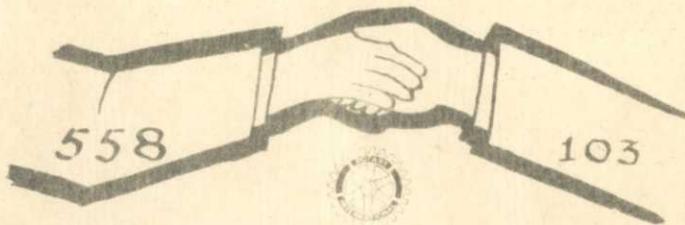
Late in the period, as in the past, the refuge manager met with the Benson County Board of Commissioners to discuss refuge activities. This year he was able to personally present the check for the past year's shared revenue.

The meetings of several wildlife clubs were attended as were those of the Boy Scouts, and various other organizations and activities.

Newcastle Upon Tyne
662150

KILLINGWORTH HALL,
KILLINGWORTH,
NEWCASTLE UPON TYNE 12.

26 Mar 64



"THE YANKS ARE COMING!" - and Rotarian and
Mrs. BAUMAN from Devils Lake, North Dakota,
are coming to stay with us. They have
expressed a desire to meet as many Rotarians
with their ladies as possible - therefore
would you come and have a drink and a
chatter on Tuesday, April 7th, any time after
8 p.m.

Charles and Winifred



HOME (AWAY FROM HOME) FOR THE HOLIDAY — Four foreign students at the University of North Dakota arrived by train in Devils Lake Wednesday afternoon and will spend the Thanksgiving holiday with the families of four local Rotarians. Pictured in this scene of welcoming at the depot are (from left) Shashi Kumar of Bombay, India; Yong Lee of Seoul, Korea; D. V. Murty of Visakhatnam, India; Rotarian John Bauman; Rotarian Leo Studness; and David Chow of Hong Kong. (Journal Photo)

For Holiday

4 Students From Orient Visit City

Four students from the Orient are spending this Thanksgiving holiday — peculiar to the Western Hemisphere in Devils Lake today as guests of the Devils Lake Rotary Club.

The four, all attending the University of North Dakota, arrived here by train Wednesday afternoon and went to homes where they'll stay until Sunday. This is the list of students and their hosts:

Shashi Kumar of Bombay, India, at the home of Mr. and Mrs. John Bauman at Fort Totten; Yong Lee of Seoul, Korea, at the home of Mr. and Mrs. A. E. Swan; D. V. Murty of Visakhatnam, India, at the home of Mr. and Mrs. Bob Mahanna; and David Chow of Hong Kong, at the home of Mr. and Mrs. Leo Studness.

As explained by Studness, this is an international service project of the Rotary Club. It was initiated by the Williston Rotarians some years ago, he added, the Devils Lake club took it up this year. The idea is to acquaint the foreign students with the Thanksgiving holiday as observed in an American home.

Four other foreign students went on to Williston Wednesday.

All the local guests are eventually planning to return to their homelands. Two are graduate students — Lee in law school and Murty in mechanical engineering. The other two are juniors, Kumar in electrical engineering and Chow in chemical engineering.

The guest at the Studness home, Chow, came to North Dakota three years ago from Hong Kong. Four years before that he went from his home in Hong Kong. His impression of the Rotary Club project: "I think it's a good idea which helps us know the American family better."

*Return to Public Relations
Devils Lake Journal*

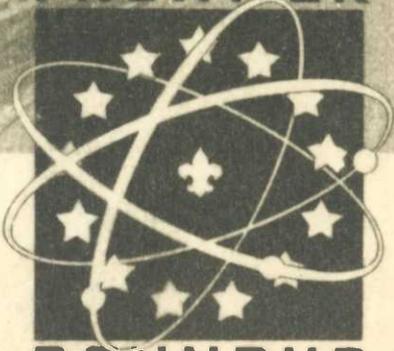
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Date of issue November 25, 1964

Sent by John K. Bauman

Stationed at Shiles Hill Preserve



FRONTIER

ROUNDUP
BOY SCOUTS OF AMERICA

CERTIFICATE
is presented to

JOHN BAUMAN

for outstanding participation in the
FRONTIER ROUNDUP

Harrison W. Oehler

September 1, 1964

BOY SCOUTS OF AMERICA

- D. VIOLATIONS: With the entrance on duty of clerk, Henry W. Hagness on September 28, the refuge manager was soon freed from many office duties. By the third week of October, the refuge manager was able to devote much time to the law enforcement phase of refuge activities.

On October 31, near Lake Alice Refuge, two hunters, Mr. Theodore Martinsen of Benedict, North Dakota and Mr. Robert Kennedy of Sawyer, North Dakota, were apprehended and successfully prosecuted on two counts: exceeding the daily bag limit of Canada geese; and exceeding the possession limit of Canada geese. These men were taken into state court before John Traynor and each was fined \$15.00 and \$10.00 cost on each of the two counts. Their guns were also seized by the court. Since the guns were pretty nice and of considerable value, this probably hurt more than the loss of \$50.00 each in fines and court costs.

The refuge manager had observed these men shoot eleven Canada in addition to seeing two that were already in their possession. The daily bag and possession limit on Canada geese in this area this year is two birds.

On November 14, Mr. Eli J. Huffman, Minnewaukan, North Dakota, was apprehended hunting the Silver Lake Refuge boundary with his son, a minor. At the close of shooting they had seven mallards and one baldpate in their possession all of which Mr. Huffman claimed to have shot.

On November 18, United States Commissioner Walter C. Mikkelson fined Mr. Huffman \$50.00 for taking more mallards than permitted by law (the legal limit is two) and \$20.00 for taking more ducks than permitted by law (the legal limit is four.)

Two juveniles, Robert Joseph Roller and Steven Micheal Clifford both of Grand Forks, were apprehended on November 1, by the refuge manager. Each boy had shot into the Lac aux Mortes Refuge and each killed a Canada goose. The incident was discussed with the parents of these boys by Agent Blazevic and no further action recommended due to the age of the boys.

State Warden La Von Grinde successfully prosecuted a deer case on the Pleasant Lake Refuge.

Violations by Indian people at Sully's Hill have become a problem and apparently one that little can be done about. The successful prosecution of whites is over shadowed by our inability to do anything about the Indian and the constant harassment of wildlife by the Indian and his dogs.

Refuge violations include speeding, drunk and disorderly, trespassing, animal trespass (ponies, dogs), hunting, trapping, removal of government property, dumping of refuse, destruction of hay stacks, etc. The situation has been further aggravated by a general deterioration in reservation law and order. It is also complicated by "revenge" tactics. One man had his hay stacks fired by an Indian youth whose dog he had shot. The fact that the dog was molesting the farmer's livestock meant nothing. This is not an isolated incident either.

- F. SAFETY: We have two accidents to report for the period. Both were disabling.

On November 24, while hurrying to close the corral gate to pen the buffalo for slaughter; Maintemanceman Nelson, tripped on a frozen buffalo chip, spraining his ankle. Mr. Nelson was disabled for nine days.

On December 9, while dressing an elk, Refuge Manager Bauman received a small cut over the knee. The cut was very shallow and appeared quite insignificant. First aid was given and a doctor consulted. However, three days later infection set in. The refuge manager was disabled four days.

VII OTHER ITEMS

- A. Items of Interest. During the summer months Mr. John W. Jones was again with us. Mr. Jones, a student at the Bottineau School of Forestry, did much of the work of touring visitors and caring for the picnic and recreation area. He also gave very valuable assistance with census and other biological work. In cooperation with Biologist Hammond of the Lower Souris Refuge, Mr. Jones did a very commendable piece of work in a brood chronology study. The study involved a twenty-five mile transect starting at the refuge and covering some very fine pothole country to the south and east.

On September 29, Mr. Henry Hagness entered on duty and filled the vacant clerk's position. Mr. Hagness, a Navy veteran, is a native of Grand Forks, North Dakota. He recently completed a forty-three week secretarial course under the Manpower Development Training Act.

- B. Photographs.



DEAD ELK SHOT AND LEFT



These two photographs illustrate illegal entry where six or seven steel posts were uprooted and the wires held down by logs so the trespasser could drive in.

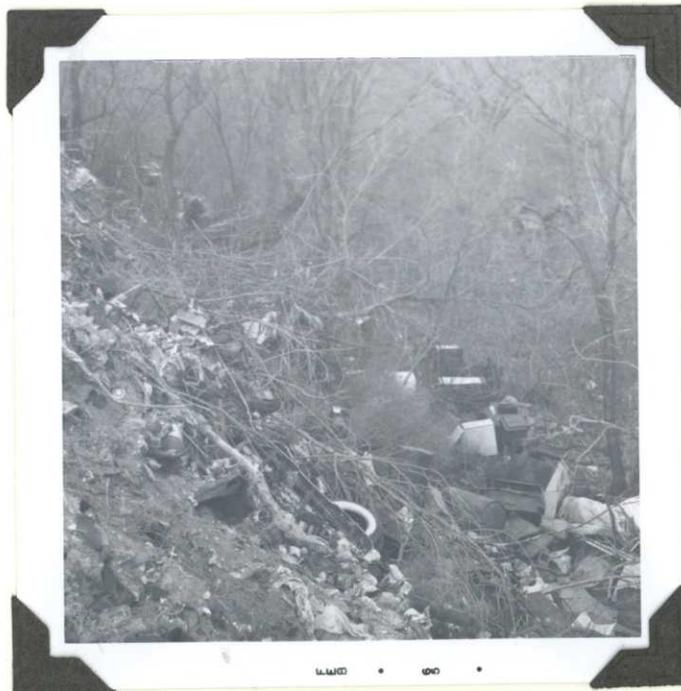
On another occasion during early spring 1964, one-half mile of fence was taken up and sold to an Oberon farmer.





The wires of this chained and padlocked gate were cut so that access could be gained to haul out illegally cut fence posts.

Unauthorized dumping of trash, car bodies, etc. is a common occurrence.



SIGNATURE PAGE

Submitted by:

John K. Bauman
(Signature)

Date: February 26, 1964 Refuge Manager
(Title)

Approved, Regional Office:

Date: 3-22-65

Edward J. Smith
(Signature)
Asst
Regional Refuge Supervisor

NORTH DAKOTA EASEMENT REFUGES - DISTRICT #2

BUFFALO LAKE

ROCK LAKE

BRUMBA LAKE

SNYDER LAKE

JOHNSON LAKE

SIBLEY LAKE

LAC AUX MORTES

SILVER LAKE

LAMBS LAKE

STUMP LAKE

LITTLE GOOSE

WOOD LAKE MARSH

PLEASANT LAKE

- A. Weather and Water Conditions. As can be seen from the accompanying table, we entered the period with very low water conditions. Winter's snow accumulation had all melted by March 1st with no run-off produced. This melt and subsequent below zero weather produced a frost layer in the ground. Heretofore, it had been dry and porous. In effect, it set the stage for run-off from the limited amount of snow that followed.

Storms of March 19 and March 23, dumped some snow in the district. Samples of snow at Sully's Hill yielded one inch of moisture. A snow survey along the Mauvais Coulee on March 28, found as good and better moisture yields. The heaviest snow cover was found in the vicinity of Cando with a moisture yield in excess of two inches. April 1st and 2nd were warm (up to 45°) and run off was produced that helped water levels. Rain and melting snow fell on April 6 and April 12 and 13. Somehow, enough runoff was received to maintain our lakes, although when the year began we were sure that refuges such as Rock Lake and Sibley Lake would be bone dry and duckling death traps, by mid-summer. This was not the case although, as can be seen from the tables, we didn't have a very bright water level picture at the close of the period.

- B. Waterfowl. The ice left our refuge lakes later than last year. The spring waterfowl migration was later than in former years. Refuge district goose and swan useage was only about 25% of last year with duck useage about 65 per cent.

Breeding pair counts were made on May 27. These counts were made by the Refuge Manager and Pilot-biologist Windship. Total breeding pair and lone males for the easement district were down 24% from the previous year. Table II, included in this report, shows the result of this count in comparison with last year. Table III shows the results by refuge and species.

On the basis of this 24% reduction in breeding pair seen, one might speculate that total easement district waterfowl production would be down around 24%, with total production something over 3,200 ducks. However, we feel that production was even lower.

For some reason, no early broods were seen and the peak of the hatch was almost two weeks later than usual. This was determined by our brood chronology transect. This later hatch peak was also observed and confirmed by other biologists doing the same type of transect elsewhere in North Dakota.

Aerial brood counts, ^{WRE} again made but not with the refuge aircraft as in the past. The results of this count made on July 30 are in Table IV. Based on this table duck production is down 40% from 1963.

We feel that this is more reliable than the 24% based on breeding pair. We feel that the reduction in breeding populations, plus the complete failure of early nesters, and the poor water conditions with a complete lack of "satelite" potholes, would indicate a drastic reduction in production. A sample brood count made from the ground on five of the refuges when compared with a like count made in 1963, verified this drop in production and indicated that the trend might have been somewhat greater than the aerial count revealed.

The fall migration was a bit ahead of last year (see Sully's Hill Report). Due to the low water condions and complete lack of water in most lakes, the bulk of the geese concentrated on Sweetwater Lake (non refuge) and Lac aux Mortes Refuge (Lake Alice) with smaller flocks using outlying areas until the constant disturbance drove them to one of these two lakes. To a lesser degree this was also true of the Silver Lake Refuge and Rock Lake Refuge where fair concentrations built up. The concentrating of the birds on these few lakes, concentrated the hunters, also. Hunting pressure was terrific! Firing lines and fields near these water areas were over populated with hunters. After a few weeks of persecution

the geese were going out farther and farther to feed with flocks from Lake Alice Refuge going over twenty miles northeast.

Large mallard populations used all refuges. Prior to the hunting season they were found on all water areas. However, it didn't take them long to find "safe" water after the shooting started. Lake Alice opened the season with a population of about 25,000 and it soon built up to a peak of nearly 100,000. Mallard populations using some of the other refuges were as follows: Buffalo lake 1,200; Brumba 4,500; Johnson Lake 3,300; Lambs lake 1,300; Pleasant lake 650; Rock Lake 14,000; Snyder Lake 2,200; Sibley lake 5,000; Silver lake 3,800.

During the period missile sites were constructed near several of our refuges. One is a short distance North west of Lambs Lake, another is one mile west of Little Goose Lake, and one is about three miles northwest of Johnson Lake.

TABLE I
 SPRING AND FALL RECORD OF EASEMENT REFUGE WATER LEVELS
 of 1964

	<u>Water Depth Freeze up 1963</u>	<u>Water Depth Spring of 1964</u>	<u>Water Depth Freeze up 1964</u>
Buffalo Lake	75"	75"	75"
Brumba Lake	21"	41"	25"
Johnson Lake	38"	39"	49"
Lac aux Mortes	8"	18"	13"
Lambs Lake	8"	28"	43"
Little Goose	80"	116"	100"
Pleasant Lake	9"	29"	25"
Rock Lake	8"	11"	17"
Snyder Lake	70"	72"	80"
Sibley Lake	6"	8"	10"
Silver Lake	13"	25"	20"
Wood Lake Marsh	72"	76"	76"

TABLE II

COMPARISON OF BREEDING PAIR AND LONE MALES BY REFUGE

<u>Refuge</u>	1963 (Flown May 16)	1964 (Flown May 27)
Buffalo Lake	64	76
Brumba Lake	37	28
Johnson Lake	142	51
Lac Aux Mortes	419	424
Lams Lake	29	21
Little Goose	16	18
Pleasant Lake	136	71
Rock Lake	154	99
Snyder Lake	87	38
Sibley Lake	104	55
Silver Lake	185	71
Wood Lake Marsh	<u>17</u>	<u>10</u>
TOTALS	1,390	962

TABLE III

Total breeding pair and lone male by species for each refuge

Aerial Count of May 27, 1964

Refuge	Mallard	Gadwall	Baldpate	Pintail	B.W. Teal	Shoveler	G.W. Teal	Redhead	Canvasback	Ruddy	Scaup	Other
Buffalo Lake	9	8	1	3	20	4		11	9	1	2	8
Brumba Lake	2	2			5			7	2	3	5	2
Johnson Lake	12	9		2	7	4		4	7	5	1	
Lac Aux Mortes	12	25	9	7	54		1	150	8	135	22	1*
Lambs Lake	5	11			2	3						
Little Goose Pleasant Lake	4	2		2	2	1		6	1			
Rock Lake	4	6		1	4	3		16	14	2	21	
Snyder Lake	12	30	2	3	13	5	2	6	10	2	10	4
Sibley Lake	2	5		2	4			14			9	2
Silver Lake	7	22		4	12	8			2			
Wood Lake Marsh	14	35	1	2	3	7		5	1		2	1*
	6							2			2	
TOTAL	89	155	13	26	126	35	3	221	54	148	74	18

* Ring-necked duck

TABLE VI

EASEMENT REFUGE AERIAL BROOD COUNTS 1961 - 1964

<u>Refuge</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>
Lac Aux Mortes	26	52	65	40
Buffalo Lake	33	7	19	17
Brumba Lake	8	12	9	8
Johnson Lake	34	44	33	19
Lambs Lake	11	3	3	8
Little Goose	4	2	1	4
Pleasant Lake	9	9	24	9
Rock Lake	132	37	24	18
Snyder Lake	6	15	15	4
Sibley Lake	51	26	30	10
Silver Lake	17	9	9	3
Wood Lake Marsh	<u>4</u>	<u>2</u>	<u>3</u>	<u>2</u>
TOTAL	335	218	235	142